

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application

1-21. (Canceled)

22. (Previously presented) A heating device for fluids, the heating device being adapted for mounting thereof in a continuous flow heater, the heating device comprising:

- at least one heating element configured as an electric resistance heater; and
- at least one heat exchanging element for the exchange of heat between the heating element and a fluid, the heat exchanging element being connected in a heat-conducting manner to the heating element and the fluid so as to transfer the heat generated by the heating element to the fluid and the heat exchanging element forming an integral housing component of a pressure-resistant and temperature-resistant continuous flow heater and having a substantially planar central area on which the heating element is mounted.

23. (Currently Amended) The heating device according to claim 22, wherein the heating element comprises a plurality of electrically interconnected heating sections that substantially cover the entire central area except for a mounting area ~~that provides access~~, the mounting area providing an area for mounting through the heating sections a temperature monitoring device.

24. (Previously presented) The heating device according to claim 23, wherein the heating element includes at least one heating circuit through electrical connection of corresponding heating sections.

25. (Previously presented) The heating device according to claim 22, wherein the heating element is formed from a material having a positive temperature characteristic (PTC).

26. (Previously presented) The heating device according to claim 22 and further comprising a temperature monitoring device disposed on the heat exchanging element that is in good heat-conducting connection with the heat exchanging element.

27. (Currently Amended) The heating device according to claim 26, wherein the heating element comprises a plurality of electrically interconnected heating sections that substantially cover the entire central area except for a mounting area ~~that provides access~~, the mounting area providing an area for mounting through the heating sections and the temperature monitoring element is disposed in the mounting area adjacent to the heating element.

28. (Previously presented) The heating device according to claim 26, wherein the temperature monitoring element is formed by an NTC resistance.

29. (Previously presented) The heating device according to claim 22, wherein the heat exchanging element consists of a material that exhibits a first thermal conductivity in a first

direction in which heat is to flow from the heating element to the fluid and a second thermal conductivity in a second direction perpendicular to the first direction, the first thermal conductivity being greater than the second thermal conductivity.

30. (Previously presented) The heating device according to claim 22 and further comprising a contacting device disposed on the heat exchanging element that is electrically connected to the electrical elements of the heating element.

31. (Previously presented) The heating device according to claim 30, wherein the contacting device is electrically connected to each heating circuit of the heating element and the temperature monitoring device.

32. (Currently Amended) A continuous flow heater comprising:
a heating device including:
a heating element; and
at least one heat exchanging element for the exchange of heat between the heating element and a fluid, ~~the heat exchanging element being connected in a heat-conducting manner to the heating element and the fluid so as to transfer the heat generated by the heating element to the fluid, the heat exchanging element being connected in a heat-conducting manner to the heating element and the fluid so as to transfer the heat generated by the heating element to the fluid and~~ the heat exchanging element forming an integral housing component of a pressure-resistant and temperature-resistant continuous flow heater and having a substantially planar

central area on which the heating element is mounted, and the heat exchanging element being in direct contact with the fluid; and

a molded part separate from the heating device and connected positively to the heating device in a pressure-resistant and thermally stable manner to form a fluid chamber, the molded part having at least one inlet and at least one outlet.

33. (Previously presented) The continuous flow heater device according to claim 32 and further comprising a temperature monitoring device disposed on the heat exchanging element of the heating device in an area situated close to the inlet in the molded part.

34. (Currently Amended) A method for producing a heating device for fluids, the method comprising the steps of:

a. providing a semi-finished product ~~having thermal conductivity in a lateral direction that is less than its thermal conductivity in a direction perpendicular to the lateral direction;~~

b. forming a substantially flat heat exchanging element from the semi-finished product having an inner surface and an outer surface and a substantially planar central area;

c. applying a heating element embodied as an electrical resistance heater to the central area of the heat exchanging element leaving a mounting area; and

d. applying a temperature monitoring device to the mounting area so that the temperature monitoring device is not influenced by the heating element during operation of the continuous flow heater,

wherein the semi-finished product has a first thermal conductivity in a first direction in which heat is to flow from the heating element to the fluid and a second thermal conductivity in a second direction perpendicular to the first direction, the first thermal conductivity being greater than the second thermal conductivity.

35. (Previously presented) The method according to claim 34, wherein applying a temperature monitoring device to the mounting area includes applying the temperature monitoring device directly to the heat exchanging element.

36. (Previously presented) The method according to claim 34 and further comprising applying a contacting device to the heat exchanging element and electrically connecting to the electrical elements of the heating device.

37. (Previously presented) The method according to claim 34, wherein the heating element and the temperature monitoring device are applied to the same side of the heat exchanging element.

38. (Previously presented) The method according to claim 34, wherein the heating element and the temperature monitoring device together with the contacting device are applied to the outer surface of the heat exchanging element.

39. (Currently Amended) A method for producing a continuous flow heater comprising the steps:

- a. producing a heating device including at least one heating element configured as an electric resistance heater and at least one heat exchanging element for the exchange of heat between the heating element and a fluid, the heat exchanging element being connected in a heat-conducting manner to the heating element and the fluid so as to transfer the heat generated by the heating element to the fluid, the heat exchanging element coming into direct contact with the fluid, and the heat exchanging element forming an integral housing component of a pressure-resistant and temperature-resistant continuous flow heater and having a substantially planar central area on which the heating element is mounted;
- b. producing a molded part separate from the heating device with at least one inlet and at least one outlet; and
- c. positively joining the heating device and the molded part so that the assembly is pressure-resistant and thermally stable.

40. (Previously presented) The method according to claim 39, wherein joining together the heating device and molded part includes inserting a sealing ring therebetween.

41. (Previously presented) A dishwasher for washing items, the dishwasher comprising:

a container for retaining items to be washed; and

a heating device including:

a heating element;

at least one heat exchanging element for the exchange of heat between the heating element and a fluid, the heat exchanging element being connected in a heat-conducting manner to the heating element and the fluid so as to transfer the heat generated by the heating element to the fluid, and the heat exchanging element forming an integral housing component of a pressure-resistant and temperature-resistant continuous flow heater and having a substantially planar central area on which the heating element is mounted;

a mounting area within the central area; and

a temperature monitoring device mounted within the mounting area so that the temperature monitoring device is not influenced by the heating element during operation of the continuous flow heater.

42. (Currently Amended) A dishwasher for washing items, the dishwasher comprising:

a container for retaining items to be washed; and

a continuous flow heater having a heating device and a molded part, the heating device including a heating element and at least one heat exchanging element for the exchange of heat between the heating element and a fluid, the heat exchanging element being connected in a

heat-conducting manner to the heating element and the fluid so as to transfer the heat generated by the heating element to the fluid, the heat exchanging element being in direct contact with the fluid, and the heat exchanging element forming an integral housing component of a pressure-resistant and temperature-resistant continuous flow heater and having a substantially planar central area on which the heating element is mounted, and the molded part being separate from the heating device and connected positively to the heating device in a pressure-resistant and thermally stable manner to form a fluid chamber, the molded part having at least one inlet and at least one outlet.

43. (Currently Amended) The continuous flow heater device according to claim 32, further comprising a mounting area within the central area, the mounting area ~~being for mounting~~ having a temperature monitoring device mounted therein.

44. (Currently Amended) The method according to claim 39, further comprising providing a mounting area within the central area, the mounting area ~~being for mounting~~ having a temperature monitoring device mounted therein.

45. (Previously presented) The dishwasher according to claim 42, further comprising a mounting area within the central area, the mounting area being for mounting a temperature monitoring device.

46. (Previously presented) The heating device according to claim 22, further comprising a connecting element located at a periphery of the heating device, the connecting element being adapted to connect to a corresponding connecting feature of the continuous flow heater,

wherein the connecting element does not cross a plane that intersects and is parallel to the central area.

47. (Previously presented) The heating device according to claim 22, further comprising lugs arranged at a periphery of the heating device,

wherein the heating device is adapted for mounting as an integral unit to a corresponding part to form the continuous flow heater, and

the lugs are adapted to engage hooks on the corresponding part.

48. (New) The continuous flow heater according to claim 32, further comprising lugs arranged at a periphery of the heating device,

wherein the heating device is adapted for mounting as an integral unit to the molded part to form the continuous flow heater, and

the lugs are adapted to engage hooks on the molded part.

49. (New) The method according to claim 34, further comprising providing lugs arranged at a periphery of the heating device,

wherein the lugs are adapted for engaging hooks on a corresponding part, the heating device being adapted for mounting as an integral unit to the corresponding part to form a continuous flow heater.

50. (New) The method according to claim 39, further comprising providing lugs arranged at a periphery of the heating device; and

providing hooks arranged on the molded part,

wherein the lugs engage the hooks in the positively joining step.

51. (New) The dishwasher according to claim 41, further comprising lugs arranged at a periphery of the heating device,

wherein the heating device is adapted for mounting as an integral unit to a corresponding part to form the continuous flow heater, and

the lugs are adapted to engage hooks on the corresponding part.

52. (New) The dishwasher according to claim 42, further comprising lugs arranged at a periphery of the heating device and hook provided on the molded part,

wherein the heating device and the molded part are positively connected by the lugs engaging the hooks.